

303 100

36

Work Order ID 94080

94080

Page 1

November-30-12 8:35:32 AM

Item ID: D4149-5

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Eyebolt Stud

Start Date: 12/10/12 Start Qty: 12.00

12

Cust Item ID:

Required Date: 12/10/12 Req'd Qty: 12.00

12

Customer:

Reference:

Approvals: Process Plan: MLJ Date: 12-12-03 Tooling:

Date: _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____

Date: _____

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D4149	C								
100		0.00							
100									
Doosan	Memo	0.00							
Doosan Lathe	turn as per dwg and folio FA950 DWG REV: <u>C</u> FOLIO REV: <u>MM</u>								
	DEBURR								
110	QC2- Inspect parts off machine FAI/FAIB	0.00							
110									
QC	Memo	0.00							
Quality Control									

2.2.2

6 4

DAS
04
9-89

12.12.12

12 4

DAS
04
9-89

Work Order ID 94080

94080

Page 2

November-30-12 8:35:32 AM

Item ID: D4149-5

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Eyebolt Stud

Start Date: 12/10/12 Start Qty: 12.00

12

Cust Item ID:

Required Date: 12/10/12 Req'd Qty: 12.00

12

Customer:

Reference:

Run Start *NR1*

Approvals: Process Plan:

Date:

Tooling:

Date:

Stop *NR2*

QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID Tool # Plan
Code Accept Reject Reject Insp.
Qty Qty Number Stamp

120

QC8- Inspect parts - second check

0.00

12/12/15

16

0

120

QC

Memo

0.00

Quality Control

150

Identify as per dwg & Stock Location: 8/145 0.00

150

Packaging

Memo

0.00

Packaging

160

QC21- Final Inspection - Work Order Release

0.00

160

QC

Memo

0.00

Quality Control

16x

SP.
12-12-17.

12/12/18

MLJ 12-12-18

Picklist Print

November-30-12 8:35:32 AM

Page 1

Work Order ID: 94080
 Parent Item: D4149-5
 Parent Item Name: Eyebolt Stud

Start Date: 12/10/12 Required Date: 12/10/12
 Start Qty: 12.00 Required Qty: 12.00

Comments: IPP REV:A NEW ISSUE 10-07-22 JLM VERIFIED BY:DD IPP Rev:B 11.03.03 as per revC
 DD verf:JLM

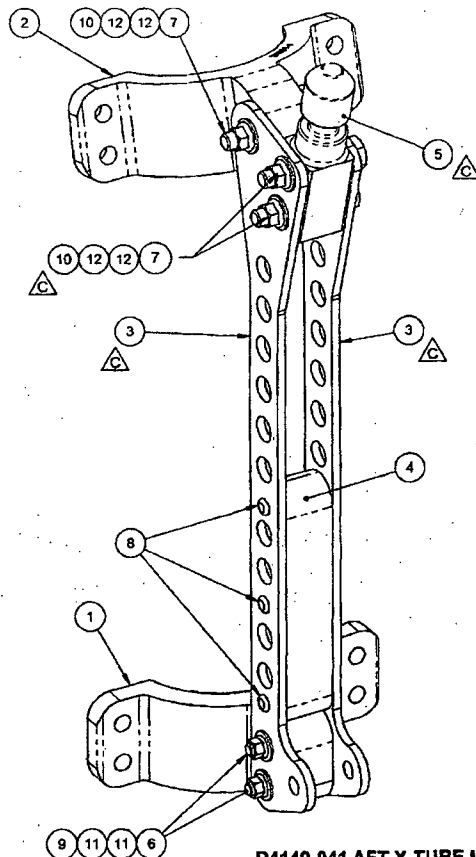
Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M303R1.000 303 Round Bar 1.00		Purchased	No			100	f	42.8585	0.25	3.1578948			

Location	Loc Qty	Loc Code
MAT028	42.85845789	
120866	0.7	
121070	3.31515789	
121282	0.45	
121728	1.517	
122386 ✓	12.543	
123294	24.3333	

12.12.12

DAS
04
8-89

3.04



D4149-041 AFT X-TUBE LUG ASSY

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D4149-041" USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: 2.21 lbs

ITEM	QTY -041	P/N	DESCRIPTION
	X	D4149-041	AFT X-TUBE LUG ASSY
1	1	D3910-1	X-TUBE LUG
2	1	D4091-1	MOUNTING LUG
3	2	D4149-1	AFT X-TUBE LUG PLATE
4	1	D4149-3	SPACER
5	1	D4149-5	EYEBOLT STUD
6	2	AN3C12A	BOLT
7	3	AN4C13A	BOLT
8	3	MS20615-4M18	RIVET
9	2	MS21043C3	NUT
10	3	MS21043C4	NUT
11	4	NAS1149C0332R	WASHER
12	6	NAS1149C0432R	WASHER

UNCLASSIFIED

SUBJECT: AFT X-TUBE LUG ASSY

DATE: 12-12-03

94080 MLS

12-12-03

RELEASED 2011-02-23

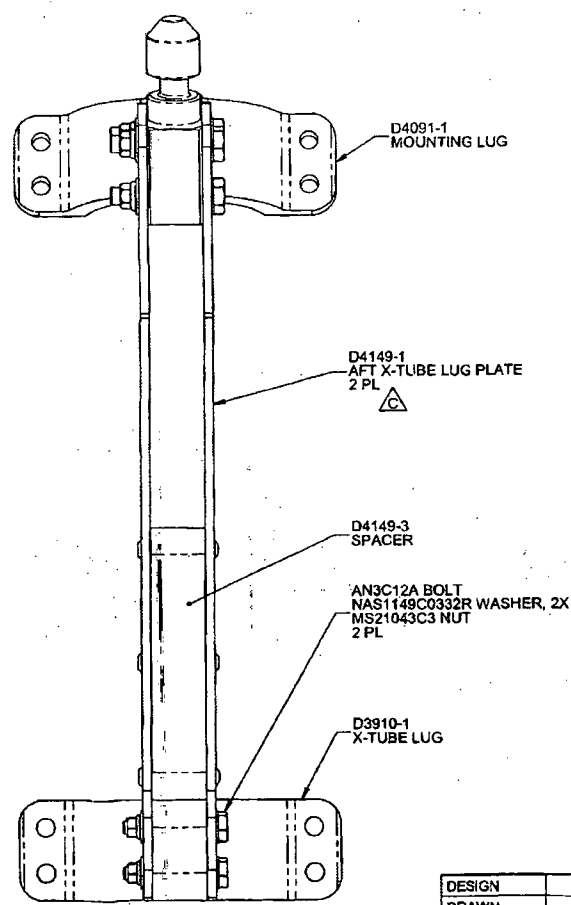
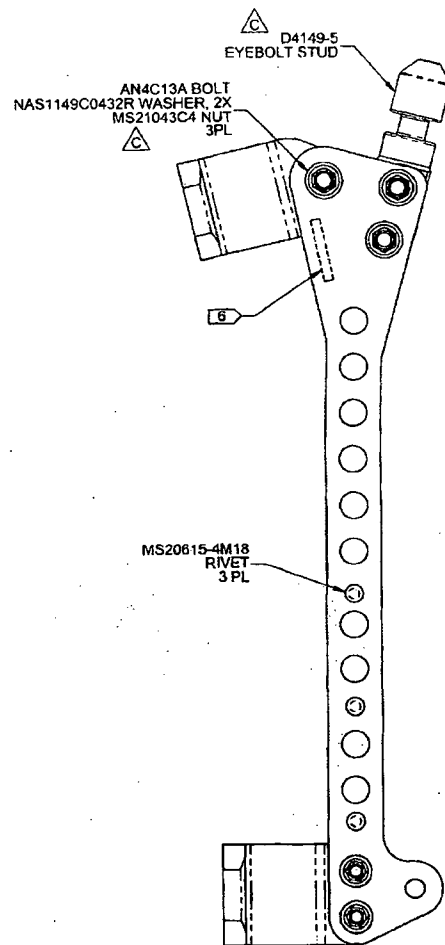
C	HOLE DIA CHANGED TO 0.252" (D8-3); HOLE DIA CHANGED TO 0.250" (C8-6); REPLACED QTY(2) AN3C12A, MS21043C3 AND QTY(4) NAS1149C0332R WITH QTY(2) AN4C13A, MS21043C4 AND QTY(4) NAS1149C0432R (D3-1, D7-2)	SC	11.02.22
B	MS20615-4M18 WAS MS20615-4M20 (ZN D3-1 & B7-2); ADDED D4149-5 (SHT 5); D4149-5 WAS D3909-5 (ZN D3-1 & D7-2); REPLACED QTY(3) MS20615-4M18 WITH QTY(2) EACH AN3C12A, MS21043-3 AND QTY(4) NAS1149C0332R WASHER (ZN D3-1, C7-1, B7-2 & B3-2); Ø0.191 2 PL REPLACES Ø0.129 3 PL (ZN D8-3); REASON: SEE TR-D350-007-2 REV. B.	MB	10.07.05
A	NEW ISSUE	MB	10.06.18
REV.	DESCRIPTION	BY	DATE
DESIGN	MB		
DRAWN	SC		
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	11.02.22		

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA

DRAWING NO. **D4149** REV. C
SHEET 1 OF 5
TITLE **AFT X-TUBE LUG ASSY** SCALE NTS

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74080

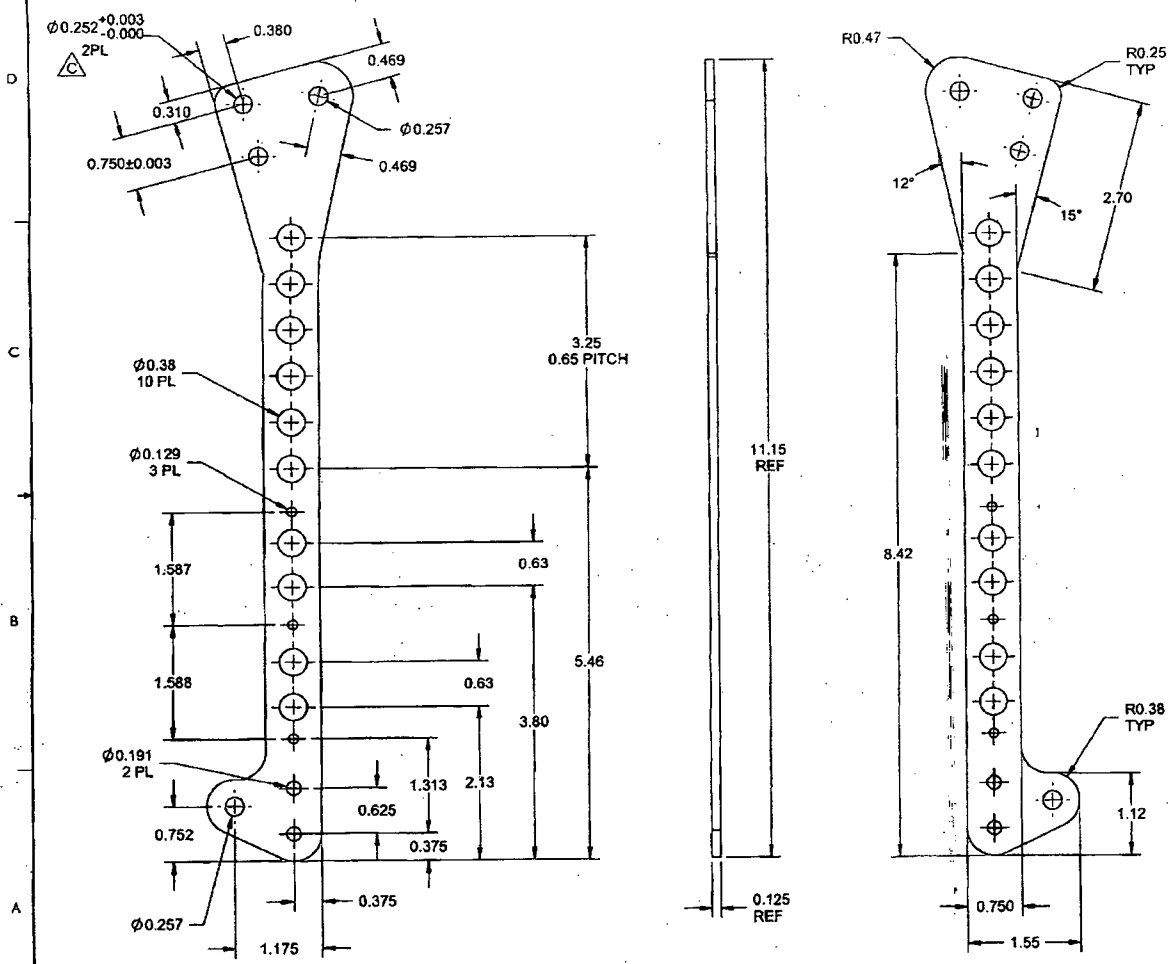


D4149-041 AFT X-TUBE LUG ASSY

RELEASED
2011-02-24
MP

DESIGN	MB	DART AEROSPACE LTD	
DRAWN	SC	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO. D4149	REV. C
MFG. APPR.			SHEET 2 OF 5
APPROVED		TITLE	SCALE
DE APPR.		AFT X-TUBE LUG ASSY	NTS
DATE	11.02.22	<small>COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR DISCLOSED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	

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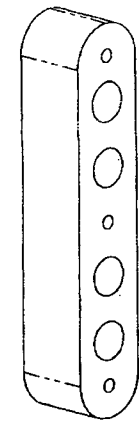
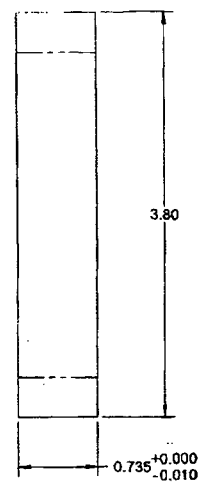
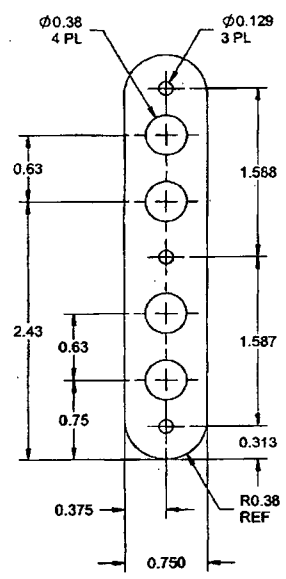


D4149-1 AFT X-TUBE LUG PLATE

- NOTES:**
- 1) MATERIAL: 303/304/316 STAINLESS STEEL 0.125" SHEET
ANNEALED 2B FINISH
PER MIL-S-5059 OR AMS 5513/5524 OR ASTM A240
OR ASME SA240
REF DART SPEC M304S11GA OR M303S11GA
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: NONE
 - 7) WEIGHT: 0.33 lbs

DESIGN	MB	DART AEROSPACE LTD	
DRAWN	SC	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. C
MFG. APPR.		D4149	SHEET 3 OF 5
APPROVED		TITLE	SCALE
DE APPR.		AFT X-TUBE LUG ASSY	NTS
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14080



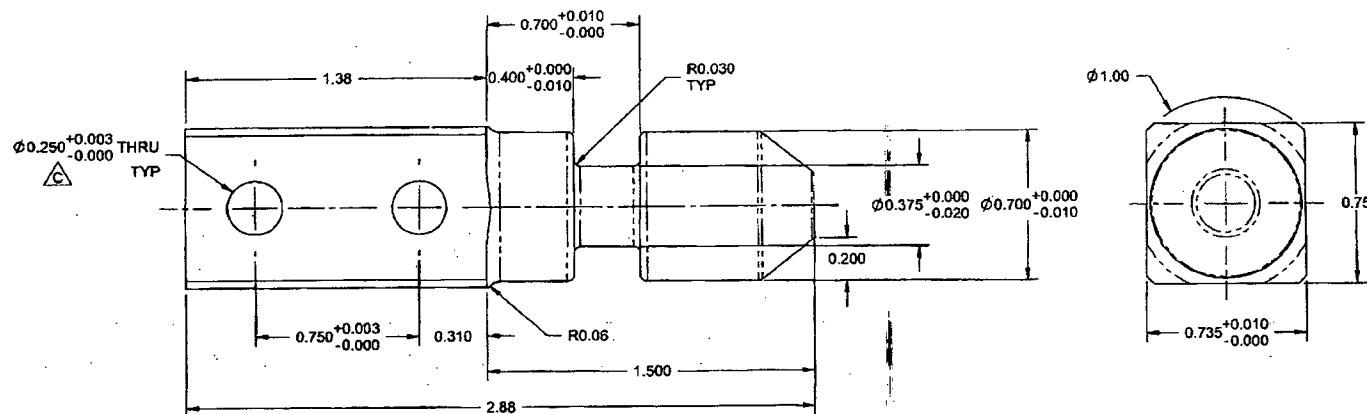
D4149-3 SPACER

RELEASED
2011-02-24

- NOTES:
- 1) MATERIAL: 303/304/316 STAINLESS STEEL BAR PER ASTM A276 OR A582
REF DART SPEC MS304B OR MS303B
 - 2) FINISH: NONE
 - 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK ALL SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: NONE
 - 7) WEIGHT: 0.47 lbs

DESIGN	MB	DART AEROSPACE LTD	
DRAWN	SC	HAWKESSURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. C
MFG. APPR.		D4149	SHEET 4 OF 5
APPROVED		TITLE	SCALE
DE APPR.		AFT X-TUBE LUG ASSY	NTS
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94080



D4149-5 EYEBOLT STUD

RELEASED
2011-02-24

NOTES:

- 1) MATERIAL: 303/304/316 STAINLESS STEEL BAR PER ASTM A276 OR A582
REF DART SPEC MS304B OR MS303B
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK ALL SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D4149-5" USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: 0.32 lbs

DESIGN	MB	DART AEROSPACE LTD	
DRAWN	SC	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. C
MFG. APPR.		D4149	SHEET 5 OF 5
APPROVED		TITLE	SCALE
DE APPR.		AFT X-TUBE LUG ASSY	NTS
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Receiving Report

Date: 12/7/12

Batch No: M122386

Supplier: MC TAUXCOAT-LE

Dart P/O: 17329

Packing Slip: Yes ☒ No ☐
 Invoice: Yes ☐ No ☒
 Receipt: Cash ☐ Cr ☐

Release Note Attached: Yes ☒ No ☐ N/A ☐
 Waybill Attached: Yes ☒ No ☐ N/A ☐
 Shipment Complete: Yes ☒ No ☐ N/A ☐
 QC6 Inspection OK 12/07/14 N/A ☒
 Work Order ☐

Discrepancies

Part Number	Description	Quantity Ordered	Quantity Received	Quantity Returned	Quantity Short	Comments

Initials of receiver (if shipment OK) Level 12 [Signature]

Production/Admin: 12/7/13
 Date
 Received/Costing
 Initial

Location

Purchase Order Receipt Listing

Page 1 of 1

Friday, July 13, 2012 8:31:09 AM

All amounts are calculated in domestic currency.

All Vendors PO ID: PO17329 Receipt Dates from 7/13/2012 to 7/13/2012 All Line Item Types

All Item ID/GL/WOs: All Rec. Employees All Currencies

Grouped by Vendor ID

Purchase Order ID/ Curr Type	Line Nbr/ Insp Req	Project ID	Reference/ Description/ Cert Std	PO U/M / Stock U/M	Required Date Required Qty	Recv Date/ Recv Emp	Recv Qty (PO U/M)	Cost Per Unit/ Recv Value	Inspected Qty/ Rejected Qty (PO U/M)	MRB Qty/ MRB Reject Qty	Book Amt
Vendor ID \ Vendor Name											
PO17329	1	VC-MET001	M303R0.750	f	7/12/2012	7/13/2012	108.7500	\$4.18	0.0000	0	\$454.61
CAD	No		303 Round Bar 0.750	f	100.0000	DES102		\$454.61	0.0000	0	
			122386								
	2		M303R1.000	f	7/12/2012	7/13/2012	48.0000	\$8.41	0.0000	0	\$403.67
	No		303 Round Bar 1.00	f	40.0000	DES102		\$403.67	0.0000	0	
			122386								
	3		M304R0.750	f	7/12/2012	7/13/2012	36.0000	\$4.34	0.0000	0	\$156.14
	No		304 SS Roundbar	f	36.0000	DES102		\$156.14	0.0000	0	
			.750								
			122386								
	4		M7075T73R1.000	f	7/12/2012	7/13/2012	24.0000	\$10.90	0.0000	0	\$261.65
	No		7075-T73 Rd Bar	f	24.0000	DES102		\$261.65	0.0000	0	
			1.00								
			122386								

Total Received Quantity: 216.7500
 Total Qty to Inspect (PO U/M): 0.0000
 Total Reject Quantity: 0.0000
 Total Receipt Value: \$1,276.07
 Total Balance Due Quantity: 0.0000

**Castle Metals®**

A. M. Castle & Co.

**PACKING SLIP/
CERTIFICATE OF CONFORMANCE**

Page 1 of 1

Shipment No:1384684

Ship From: A. M. Castle & Co. (Canada) Inc. MONTREAL 835-SELKIRK AVENUE POINTE CLAIRE, QUEBEC H9R 3S2		Sold To: DART AEROSPACE LTD 1270 ABERDEEN HAWKESBURY, ON K6A 1K7 CA		Ship To: DART AEROSPACE LTD 1270 ABERDEEN HAWKESBURY, ON K6A 1K7 CAN		Deliver To: DART AEROSPACE LTD 1270 ABERDEEN HAWKESBURY, ON K6A 1K7 CA	
Date Shipped 11-JUL-2012	F.O.B. ORIGIN	Freight Terms Prepaid	Carrier MANITOULIN		BOL No 1384684-2		

Shipment Details	Final Destination Branch - MON
-------------------------	---------------------------------------

Order No 2290467	Line No 2	Item No 4665	Description 1.0000.RD.303.STAINLESS.CF.ANN.132.0000-156.0000 SPECIFICATIONS: ASTM A582				
Purchase Order No 17329		Part Number		Ordered Qty 48.00 FT		Invoice Qty 48.0000 FT	
Details							
Delivery No. 117748385	Mill	Heat Number C2X4	Mech Id	PCS 4	Width (IN) 1.0000	Length (IN) 144.0000	Shipped Qty(LBS) 128.1600

These commodities/technologies are subject to US Export Administration & US State Dept. Regulations and, if intended for export, were/are exported thereunder. Diversion contrary to US Law is Prohibited.

We hereby certify the material covered by this certification conforms in accordance with the above specifications and has been found to meet the applicable requirements for the material, including any specifications forming a part of the description. Test reports are on file subject to examination. All claims for defective material are waived unless made in writing to A.M. Castle & Co. within 60 days of the shipment. Material cut to the correct size, or material cut by the customer cannot be returned for credit.

Reviewed by Authorized Castle Metals Representative:

Date:

Name:

These commodities, technology or software were exported from the United States in accordance with the Export Administration Regulations. Diversion contrary to US law prohibited.

Date: 11-JUL-2012 02:20:50 PM



**NORTH AMERICAN
STAINLESS**

METALLURGICAL TEST REPORT

6870 Highway 42 East
Ghent, KY 41045-9615
(502) 347-6000

Certificate: 735403 16

Mail To:

A.M. CASTLE AND COMPANY
1420 KENSINGTON ROAD-SUITE 220
OAK BROOK IL 60523

Ship To:

A.M. CASTLE AND COMPANY
3400 NORTH WOLF ROAD
FRANKLIN PARK IL 60131

Date: 5/08/2012 Page: 1 Of 1

Steel: 303

Finish: Cold Draw

Dia/Thk: 1.0000 in

Leg Length:

Length: 144.00 in

Corrosion:

Customer: 0032 001

NAS Order: LN 83244 5

Your Order: 165580

Item Code: 4665

PRODUCT DESCRIPTION:

Round Bar, Annealed, Cold Draw
ASTM A582/05 EN 10204-3.1, ASTM A484/10
AMS 5640U TYPE 1, QQS-764B CONDITION A
SOLUTION ANNEAL TEMP 1900F MIN

REMARKS:

COMPLIES W/REQUIREMENTS OF DFARS EU DIRECTIVE-2002.95.
EC. ROHS. EAF+AOD+CC. NO WELD REPAIR. MELTED AND MFG IN USA
FREE FROM MERCURY AND LOW MELTING ALLOY CONTAMINATION

Bundle Weight	Bundle Weight	Bundle Weight	Bundle Weight	Bundle Weight	Bundle Weight	Bundle Weight	Bundle Weight	Bundle Weight	Bundle Weight
BE57494	1711								

CHEMICAL ANALYSIS

CM(Country of Melt) ES(Spain) US(United States) ZA(South Africa) JP(Japan)

Heat	Supplier #	CM	C	CO	CR	CU	MN	MO	N	NI	P	S
C2X4		US	.056	.12	17.41	.33	1.85	.26	.051	8.57	.029	.3480
		SI										
			.52									

MECHANICAL PROPERTIES

	1 d	HB	.2YS	UTS	RA	Elong
	o i	No.	KSI	KSI	%	% 4D
	c r					
BE57494	R L	196.0	74.27	103.69	52.70	44.36

SMK 12/07/16

NAS hereby certifies that the analysis on this certification is correct and the material meets the specifications stated.

Technical Dept. Mgr.

ERIC HESS



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO17329

Purchase Order Date 6/29/12

PO Print Date 6/29/12

Page Number 1 of 2

Order From :

VC-MET001

METAUX CASTLE
A.M. CASTLE & CO. (CANADA) INC. - BOX B9204 PO BOX 9100
TORONTO, ON M4Y 3A5
CA

Contact Name		Buyer	Chantal Lavoie
Vendor Phone	514 694 9575	Requisition Nbr	
Vendor Fax	514 695 3281	Tax Resale Nbr	10127-2607
Vendor Account Nbr		Terms	Net 30
		Currency	CAD
		FOB	Destination-Collect

Ship To : DART AEROSPACE LTD 1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

FAKED
echna

Line Nbr	Reference Revision ID Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	Req Qty/ Unit of Measure	Ship Method	Unit Price	Extended Price
1	M303R0.750 028	303 Round Bar 0.750	7/12/12 Yes	100.00 f	Yours ppd 108.75	\$4.2600	\$426.00
		Special Inst: MATERIAL: AISI 303 SS ROUND BAR AS PER ASTM A582 NOTE: AISI 304/316 NOT ACCEPTABLE					
2	M303R1.000 29	303 Round Bar 1.00	7/12/12 Yes	40.00 f	Yours ppd 48	\$8.5700	\$342.80
		Special Inst: MATERIAL: AISI 303 SS ROUND BAR AS PER ASTM A582 NOTE: AISI 304/316 NOT ACCEPTABLE					
3	M304R0.750 28	304 SS Roundbar .750	7/12/12 Yes	36.00 f	Yours ppd	\$4.4200	\$159.12
		Special Inst: MATERIAL: MATERIAL: 304/316 SS ROUND BAR AS PER ASTM A276 NOTE: AISI 303 NOT ACCEPTABLE					

**MATERIAL CERTIFICATION
REQD UPON DELIVERY**

No substitution or deviation without
consent.

Certificate of Conformity or Material
Certification required - YES NO

Change Nbr: 1

Change Date: 6/29/12



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO17329

Purchase Order Date 6/29/12

PO Print Date 6/29/12

Page Number 2 of 2

Order From :

VC-MET001

METAUX CASTLE
A.M. CASTLE & CO. (CANADA) INC. - BOX B9204 PO BOX 9100
TORONTO, ON M4Y 3A5
CA

Contact Name

Vendor Phone

Vendor Fax

Vendor Account Nbr

514 694 9575

514 695 3281

Buyer

Requisition Nbr

Tax Resale Nbr

Terms

Currency

FOB

Chantal Lavoie

10127-2607

Net 30

CAD

Destination-Collect

4	M7075T73R1.000	7075-T73 Rd Bar 1.00	7/12/12 Yes	24.00 f	Yours ppd	\$11.1100	\$266.64
---	----------------	----------------------	----------------	------------	-----------	-----------	----------

Special Inst: MATERIAL: 7075-T73 OR 7570-
T7351/T73510/T73511 ROUND BAR
AS PER AMS-QQ-A-200/1 OR AMS-QQ-A-
225/9

PO Total:

\$1,194.56



Change Nbr: 1

Change Date: 6/29/12

No substitution or deviation without
consent.

Certificate of Conformity or Material
Certification required ☒ YES ☐ NO